



Minnesota Pollution Control Agency

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April 3, 2014

Administrative Law Judge James LaFave
Office of Administrative Hearings
PO Box 64620/600 Robert St. North
St. Paul, MN 55101

RE: Proposed Amendments to Minnesota Rules Chapter 7050 and 7053 Governing Water Quality Standards—River Eutrophication, Total Suspended Solids and Minor Corrections
OAH Docket # 60-2200-30791, Revisor ID 4104

Dear Judge LaFave:

Please find enclosed the following documents:

- 1) MPCA's rebuttal to comments received during the reopened administrative record that started on March 24, 2014 and closed on March 28, 2014.
- 2) List of Hearing Exhibits for this rulemaking, including all comments received.
- 3) A revised version of the MPCA's March 28, 2014 memorandum "Staff Information for Reopened Administrative Record". This document is revised to correct the following error to the last paragraph on page 3: *"The MPCA intended to convey that the adoption of new or modified water quality standards does not result in an effect on farming operations because water quality standards, in and of themselves, do not require any party to act."* The MPCA believes that this correction does not alter or invalidate the conclusion of that document.

If you have any questions regarding the enclosed Response, please contact Carol Nankivel at 651-757-2597 or carol.nankivel@state.mn.us.

Sincerely,

A handwritten signature in black ink, appearing to read "Shannon Lotthammer".

Shannon Lotthammer
Division Director
Environmental Analysis and Outcomes Division

SL:cn

Enclosures

wq-rule4-06aa

ED_005808A_00007523-00001

State of Minnesota
Minnesota Pollution Control Agency

In the Matter of Proposed
Amendments To Minnesota Rules
Chapters 7050 and 7053 for Rule
Amendments Governing Water
Quality Standards- River
Eutrophication, Total Suspended
Solids and Minor Corrections.
OAH Docket # 60-2200-30791,
Revisor ID # 4104.

Staff Rebuttal Response for Reopened
Administrative Record

April 3, 2014

MPCA Rebuttal Response for Reopened Administrative Record.

I. Introduction

This memorandum is the Minnesota Pollution Control Agency's (MPCA or Agency) post-hearing rebuttal response (Rebuttal) responding to comments filed during the reopened administrative record period.

Hearing Exhibit HE-8-27, from the Minnesota Department of Natural Resources (DNR) Mississippi River Team science staff, expresses support for the scientific analyses and water quality standards (WQS) for the Mississippi River navigation pools and Lake Pepin.¹ The MPCA engaged DNR science staff throughout the development of the water quality standards; and recognize their expertise in review and support of the proposed standards.

Hearing Exhibit HE-8-28, from the Minnesota Environmental Science and Economic Review Board (MESERB), summarizes arguments previously made and introduces a document related to New Hampshire's proposed water quality criteria for the coastal Great Bay Estuary. This Rebuttal responds to the arguments and new document in section II.

Hearing Exhibit HE-8-26, from Scott County Natural Resources (Scott County), restates previous comments on River Nutrient Regions (RNR) and the use of reference streams in the development of the total suspended solids (TSS) water quality standard. This Rebuttal briefly addresses the Scott County comments in section III.

¹ HE-8-27, pg. 2: "We feel that the proposed water quality standards for the Mississippi River pools and Lake Pepin have been developed through sound scientific methods and adequate peer review."

II. Response to MESERB comments and stakeholder peer review of New Hampshire's proposed water quality criteria for the coastal Great Bay Estuary

The following is a narrative summary of the MPCA's approach in developing the proposed river eutrophication water quality standards. This summary provides the basis for a detailed comparison of Minnesota's approach to the New Hampshire approach in the stakeholder peer-review document, introduced by MESERB.

A. Overview of Minnesota's approach to developing eutrophication standards

In 1999, the MPCA began sampling streams in Minnesota specifically to collect data to measure impacts from eutrophication and to support the establishment of standards to protect aquatic life should the evidence indicate they were needed. This and subsequent efforts resulted in predictable relationships between nutrients and biological stressors (i.e., chlorophyll-a (Chl-a), dissolved oxygen (DO), five-day biochemical oxygen demand (BOD₅)) and biological communities as documented in the Statement of Need and Reasonableness (SONAR),² Book 2, Exhibits EU-1 and EU-3.

With documentation of the effects of nutrients on biological stressors and the biological communities themselves, the analyses were expanded to identify regional patterns in the response of biological communities to eutrophication. During this work, which spanned over 10 years, the MPCA utilized stressor-response relationships and other methods (e.g., reference condition analysis, predictive models) to document the impacts of eutrophication on Minnesota's aquatic life uses, and to identify thresholds needed to protect these uses.³ The weight of evidence approach and the statistical methods Minnesota used were sound and adhered to EPA guidance.⁴ A letter from Dr. Dana Thomas, Chief, Ecological and Health Processes Branch and co-author of the EPA guidance re-affirms that Minnesota's approach was valid and reasonable.⁵

B. Assessment of covarying factors that can mitigate the response of streams to nutrient enrichment

Throughout the analyses, effects of covarying factors were identified and addressed using several approaches to ensure that the relationships between biological endpoints, nutrients, and related stressors were understood. SONAR, Book 2, Exhibit EU-4, describes how the aforementioned relationships were established. It also describes the role of flow and water

² Hearing Exhibit HE-3.

³ See SONAR, Book 2, pp. 92-94.

⁴ See SONAR, Book 2, Exhibit EU-20. (*Using Stressor-response Relationships to Derive Numeric Nutrient Criteria November 2010* (USEPA 2010b))

⁵ Hearing Exhibit HE-8-22.

residence time as factors that can influence phosphorus and chlorophyll relationships (pp. 256-257). The exhibit goes on to discuss the precedent for linking BOD₅ and chlorophyll in the Lower Minnesota total maximum daily load (TMDL) study, and National Pollutant Discharge Elimination System (NPDES) permits (pg. 252). Finally, the exhibit also identifies factors that may contribute to measured BOD₅, such as runoff events, as acknowledged on page 259. Using these results and results from other analyses, the eutrophication standard was developed as a composite standard which includes both a nutrient (phosphorus) component and several response variables.

During the development of the standard, critics voiced their opinion that the standard should be based on nutrients alone and that all streams should meet similar phosphorus goals. However, from Minnesota's extensive work on the relationships between nutrients and the related response variables (and previous experience in developing the lake eutrophication standards), it was clear that a reasonable standard would need to include the nutrient and the response variables. This is because there are factors that can mitigate the response of aquatic organisms to nutrient enrichment. For example, heavily shaded streams are less likely to grow undesirable amounts of algae because the lack of sunlight limits the growth of algae. As a result, our models did not predict that there would be an impact to Minnesota's aquatic life use goals in a shaded stream and therefore it should not be listed as impaired -- *even if measured phosphorus exceeds the nutrient portion of the combined standard*. The result is a set of standards that are focused on protecting and restoring streams with documented eutrophication impacts rather than an overly broad, untargeted approach.

C. Application of eutrophication standards to Wadeable streams

The relationships between nutrients and their related stressors and an understanding of the effects of covarying factors, supports the application of eutrophication standards to all stream sizes. The size of the stream does not limit the impacts of eutrophication on biological communities, but rather it is the specific characteristics of the stream that determine these relationships. This means that as a population, small streams are less likely to grow undesirable levels of sestonic algae because they tend to be more shaded and have lower residence times. However, within this population of small streams, a subset has physical characteristics that can result in the growth of large amounts of sestonic algae when they are enriched. This is not merely speculation. The MPCA has documented these impacts to small streams in Minnesota. As part of the development of the proposed standard, the MPCA identified several streams considered small or wadeable (i.e., drainage area <500 mi²) with concentrations of Chl-a that exceeded those of many nonwadeable streams (i.e., drainage area >500 mi²).⁶ The small streams that demonstrate an impact from nutrient enrichment should not be ignored due to their drainage area. Otherwise, Minnesota would be disregarding its state and federal obligations protect and when necessary, to restore the beneficial uses of its waters.

⁶ See SONAR, Book 2, Exhibit EU-1, Appendix I, pp. 114-115.

D. A river eutrophication water quality standard that protects Minnesota's aquatic life use goals

Covarying factors that can impact biological health measures were considered when identifying biological thresholds to eutrophication. As outlined in previous responses, the MPCA addressed covarying factors using a number of methods.⁷ The results of these approaches together are water quality standards linked to eutrophication impacts to biological communities that will protect Minnesota's aquatic life use goals as defined in Minn. Rule § 7050.01050, subp. 3.⁸

E. Comparison of Minnesota and New Hampshire approaches for nutrient criteria development

MESERB's comment includes a stakeholder peer review of the development of nitrogen criteria by New Hampshire for the Great Bay Estuary.⁹ The stakeholder peer review is submitted as a critique of Minnesota's approach to nutrient water quality standards. The comparison is flawed for two major reasons. First, the resources are not comparable as they differ greatly in chemical and physical conditions and in the aquatic life resources the standards are intended to protect. As a result, the data and analyses needed to support the development of a reasonable nutrient standard differ between a saltwater estuary in New Hampshire and freshwater streams in Minnesota. Second, the effort and the analyses are different in important aspects. Minnesota

⁷ Methods included, but were not limited to:

1. Development of a conceptual model supported empirically by field-collected data that established linkages between nutrients, stressors, and biological endpoints.
2. To minimize the impact of poor habitat on biological communities, channelized streams were removed from analyses. These altered streams often have poorer performing biological communities as a result of habitat conditions and the MPCA sought to minimize the impact of habitat on biological performance.
3. The relationship between total phosphorus and total suspended solids (TSS) was examined (see SONAR, Book 2, Exhibit EU-1, p. 27). The relationship demonstrated that high TSS is usually accompanied by high total phosphorus. However, the opposite was not true in that streams with high total phosphorus often do not have high concentration of TSS. This indicates that the biological communities in a large proportion of these high nutrient stream reaches are not limited by TSS.
4. Both quantile regression and changepoint analyses were used to identify thresholds from the outside of the wedge-shaped relationships between variables (see SONAR, Book 2, Exhibit EU-1, pp. 26-27). These nonparametric statistical analyses minimize the impacts of the covarying factors and result in thresholds that are linked to the response of interest. Both techniques are among those recommended for this purpose in USEPA guidance (see SONAR, Book 2, Exhibit EU-20).
5. The proposed criteria are not based on biology-stressor relationships alone. Using other criteria development methods such as a reference condition analysis, these thresholds were supported by multiple lines of evidence.

⁸ "For all Class 2 waters, the aquatic habitat, which includes the waters of the state and stream bed, shall not be degraded in any material manner, there shall be no material increase in undesirable slime growths or aquatic plants, including algae, nor shall there be any significant increase in harmful pesticide or other residues in the waters, sediments, and aquatic flora and fauna; the normal fishery and lower aquatic biota upon which it is dependent and the use thereof shall not be seriously impaired or endangered, the species composition shall not be altered materially, and the propagation or migration of the fish and other biota normally present shall not be prevented or hindered by the discharge of any sewage, industrial waste, or other wastes to the waters."

⁹ Hearing Exhibit HE-8-28a.

used a larger dataset which includes data specifically collected to support development of a nutrient standard. In addition, the analyses used by Minnesota were more sophisticated and better accounted for relevant covarying factors. Finally, the structure of Minnesota's nutrient standard, which includes causal and response criteria, ensures that the standard will be reasonably implemented to prevent overregulation of waters that exceed only one of the criteria. The following table includes a point-by-point comparison of the two studies.

Comparison of NH and MN approaches for nutrient criteria development

Approach Comparison	New Hampshire Great Bay Estuary Criteria	Minnesota River Eutrophication Standard
Charge	To develop numeric translator value(s) for existing narrative standards to help protect Great Bay. The NH effort is part of a broader nutrient criteria development effort.	MPCA is required to develop river eutrophication criteria as a part of its ongoing commitment to develop nutrient criteria for MN lakes and rivers. Noted specifically in nutrient criteria development plan submitted to EPA (SONAR, Book 2, Exhibit EU-21a-c).
Resource (scope)	Great Bay Estuary – A freshwater/saltwater estuary near the coast of New Hampshire. The bay is considered a mixing area, with varying amounts of fresh and saltwater; dependent on tides and river flow.	Freshwater streams and rivers across Minnesota.
Resource (issue)	Decline in eelgrass, which is important to health of the estuary and supports aquatic life.	Nutrient enrichment of Minnesota's streams and rivers, and negative impacts on aquatic life and downstream resources.
Primary focus (Cause – response)	Excess nitrogen and its impact on eelgrass growth and distribution in the estuary.	Excess phosphorus and its impact on river aquatic life (fish and invertebrates) as a function of excessive algal growth and bacterial metabolism; and their collective effect on organic matter, habitat, and dissolved oxygen.

Approach Comparison	New Hampshire Great Bay Estuary Criteria	Minnesota River Eutrophication Standard
Conceptual model	An existing model was used that demonstrated the various factors that influence growth of eelgrass and influence overall water quality of an estuary.	Two models were crafted. One focused on the impact of excess nutrients on suspended algae (Chl-a). This model acknowledged the covarying factors that may increase or decrease the impact of nutrients and the subsequent aquatic life impacts that arise from excessive algal growth. The second model looked at attached algae growth and important factors that regulate its development and its impact on aquatic life and recreational uses.
Data acquisition How was data assembled/acquired for purposes of developing nutrient criteria?	NH Dept. of Environmental Services queried existing datasets from several programs for the period 2000-2008.	MPCA developed specific studies to acquire appropriate data for the purpose of examining interactions/interrelationships of nutrients, algae, BOD ₅ , diel DO flux, and fish and invertebrates across a range of Minnesota rivers. Covarying factors were considered in site selection and monitoring design. In later data analysis, datasets were increased through use of MPCA biomonitoring data that allowed for inclusion of rivers and streams of all sizes across the state. Documented in SONAR, Book 2, Exhibits EU-1, 2, 3, and 4.
Multiple lines of evidence approach	Yes, included basic analysis of the data, application of a reference approach, and review of pertinent literature.	Yes, multiple lines included simple plotting and regression analysis (parametric and non-parametric) to establish basic relationships and aid in prioritizing parameters (chemical and biological) for further statistical analysis; more advanced non-parametric analysis was used to establish thresholds; a reference approach was used and extensive review of the literature. Documented in SONAR, Book 2, Exhibit EU-1.

Approach Comparison	New Hampshire Great Bay Estuary Criteria	Minnesota River Eutrophication Standard
Statistical approach	Simple linear regression was the primary method noted.	A range of statistical approaches were used with quantile regression and changepoint analysis being the primary basis for establishing thresholds for total phosphorus, BOD ₅ , sestonic Chl-a, and diel DO flux with measures of fish and invertebrate community condition. Over 200 such analyses were conducted. Thresholds were summarized for each of the above factors and the 25 th percentile was selected for consideration as a criterion. A reference condition analysis and predictive models were also used to identify protective thresholds. A final weighting process was used to select the proposed criteria values (SONAR, Book 1, Exhibit EU-1). The above noted statistical approaches were among those EPA recommended for use in its 2010 guidance document (SONAR, Book 1, Exhibit EU-20).
Covarying Factors	NH Dept. of Environmental Services addressed some covarying factors but not all of the factors the stakeholder peer review panel wanted.	MPCA addressed covarying factors using several methods: 1) Use of a conceptual model supported by empirical data to establish the relationships between nutrients and covarying factors; 2) An analysis of the relationships of total phosphorus with important covarying stressors; 3) Nonparametric methods such as quantile regression and changepoint analysis which minimize the effects of covarying factors; and 4) Structuring the criteria to address waters where covarying factors (e.g., residence time, shading) mitigate the impacts of nutrients.
Proposed criteria	A single value for total nitrogen. Value is to be used as a numeric translator for existing narrative WQS.	Ecoregion-specific values for the stressor total Phosphorus (TP) and three response variables (Chl-a, BOD ₅ , and diel DO flux) which are presented as a composite water quality standard. A determination of impairment requires exceedance of TP and one or more of the response variables.

F. Minnesota's proposed river eutrophication standards are reasonable

Nutrients and the resulting enhanced productivity pose serious threats to the water quality of Minnesota's streams and rivers. Comments on this rule argue that the MPCA's methods resulted in standards that either over-protect or under-protect the resource. The MPCA spent more than 10 years of focused study to determine and document the relationships and impacts of eutrophication in Minnesota streams to support the proposed eutrophication standard. The MPCA has been clear in developing the structure of the rule that findings of impairment and subsequent implementation activities must be linked to eutrophication and its related stressors. The structure of the standard and its implementation mean the standard will be implemented equitably and will ensure that actions resulting from implementation of the standard are linked to documented impairments. In addition, the MPCA engaged potentially affected parties in numerous meetings during the standard development process. The result of these efforts is a set of science-based, reasonable standards that are needed to protect and restore Minnesota's aquatic life use goals in streams from the impacts of eutrophication.

III. Response to Scott County comments on River Nutrient Regions and use of reference streams

The Scott County comments address two issues: the use of River Nutrient Regions; and the use of TSS monitoring data in the development of protective values for the proposed TSS WQS.

A. River Nutrient Regions

Material in the SONAR, Book 2, pp. 14 through 18, and SONAR, Book 3, pp. 8 through 10, establishes the reasonableness of using RNR in setting water quality standards. In addition, MPCA responded during the post-hearing comment period to Scott County's questions on the use of RNR for the proposed TSS water quality standards. See MPCA's Staff Post-Hearing Response to Public Comments, dated 1/28/2014, section IV.B.,¹⁰ (HE-8-17), and Attachment II

¹⁰ "The adoption of the River Nutrient Regions established in *Regionalization of Minnesota's Rivers for Application of River Nutrient Criteria* as the ecoregions for regional water quality standards is reasonable because:

- The ecoregion approach is recommended by U.S. EPA as a means for regionalizing nutrient water quality standards.
- Use and development of the RNRs were based on ecoregions established by the EPA.
- The approach used by the EPA for defining ecoregions grew out of an effort to classify streams for more effective water quality management.
- The ecoregion framework is the basis for regionalizing Minnesota's lake eutrophication standards, and the use of ecoregions in the proposed water quality standards provides for a consistent regional framework for streams and lakes.

The classification system used to define the River Nutrient Region is not in error regarding the classification of the southern lobe of the Central Region."

HE-8-17B); and MPCA's Staff Post-Hearing Rebuttal Response to Public Comments, dated 2/4/2014, section II.C. (HE-8-19).¹¹

B. Data used to develop proposed TSS water quality standards

The proposed TSS water quality standard: incorporates regional data on differences in TSS generated from the landscape; makes more complete use of biological effects data; and uses seasonal and weather-related data. Technical discussion establishing the reasonableness of the data choices and analysis supporting the TSS WQS is in SONAR Book 3, pp. 5 through 10.

Regarding the Scott County comments, there appears to be confusion on the use of "mean" and "10th to 40th percentiles" on the one hand, and the use of "90th percentile" on the other. The former and the latter are used in completely different concepts and for completely different purposes. The "10th to 40th percentile" streams, as ranked by "mean" TSS levels, are considered to be reference streams. The "90th percentile" TSS level is the point of comparison between those reference streams and streams to be assessed. This distinction and the rationale for choosing the 90th percentile as the point of comparison are explained in SONAR Exhibit TSS-1, section V.J. on pp. 24 and 25; and also responded to in the MPCA's Staff Post-Hearing Response to Public Comments, dated 1/28/2014, Attachment 1, line 13.¹²

Regarding the commenter's reference to McCollor and Heiskary's work; the Western Corn Belt Plains data was based on measurements from single locations on four streams which were selected as "minimally impacted" because they had no nearby point source discharges. In contrast, the analysis supporting the proposed TSS water quality standard draws from more recent and much more extensive data. To elaborate on MPCA's previous response to another commenter,¹³ fifteen (27 percent) of 56 streams examined in the southern region, covering the full range of water quality conditions, would meet the proposed TSS criterion. This includes the average reference stream as well as all streams better in quality.

¹¹ "Ecoregions are a cohesive scientific concept for regionalization of land and water systems which is reasonably used for multiple applications, including the regional application of water quality standards. As guided by EPA, MPCA's choice of using ecoregions is reasonable and the regions are mapped correctly at the ecoregional scale."

¹² "The 90th percentile TSS measurement of the reference streams forms the basis of comparison for the standard, and the average reference stream, by definition, then meets the standard with its 10% exceedance level. In addition, streams that are of better quality than those used as reference streams obviously would also meet the standard with its 10% exceedance level."

¹³ MPCA's Staff Post-Hearing Response to Public Comments, dated 1/28/2014, Attachment 1, line 153: "Of those stream segments (excluding large-river main-stems) currently having sufficient TSS data for assessment, 73 percent of streams in the southern region, 44 percent in the central region, and 28 percent in the northern region would not meet the criteria in the standard, and thus would potentially be considered impaired. These percentages, however, are from a limited data set and are not necessarily true of the larger body of streams in the three regions."

IV. Conclusion

Minnesota Statute § 14.131 requires the MPCA to demonstrate the reasonableness of the proposed rule amendments by an affirmative presentation of facts within the rulemaking record. The proposed TSS and river eutrophication water quality standards are supported by strong, sound science as shown by an affirmative presentation of facts in the Statement of Need and Reasonableness (SONAR) and the SONAR Technical Support Documents and other SONAR Exhibits,¹⁴ additional documents submitted at the rule hearing,¹⁵ and MPCA's post-hearing responses to comments.¹⁶

Comments throughout the hearing and post-hearing comment periods have criticized MPCA's choice of data and scientific methods and advocated the use of alternative data and methods. The existence of an alternative choice does not, by itself, make MPCA's choice unreasonable. Reasonable minds can disagree on the best course of action. MPCA can choose one reasonable method from among several reasonable methods as long as the choice is rational. The choice does not have to be the "best" choice, if that is even knowable; it has to be a reasonable choice. Other knowledgeable entities recognize the reasonableness of MPCA's choices as shown by the comments on the record by the EPA¹⁷ and the DNR.¹⁸ As administrator of the Clean Water Act, the EPA provides specific guidance to states adopting water quality standards. Minnesota followed EPA's guidance throughout the development of the proposed rule amendments. The MPCA's choice of data and scientific analysis underlying the proposed TSS and river eutrophication water quality standards is reasonable.

A proposed rule is reasonable if it is rationally related to the end sought by the underlying statutory authority and is not arbitrary.¹⁹ The end sought by the Clean Water Act section 303(c)(1) is the periodic review and updating of state water quality standards to account for advances in scientific knowledge. Up-to-date water quality standards are necessary to move toward compliance with the Clean Water Act section 101(a) goal "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The ends sought by Minn. Stat. § 115.03, subd. 1, parts (b) and (c), and Minn. Stat. § 115.44, subd. 2 and 4, are the classification of Minnesota's waters for the protection of beneficial uses, and the adoption of water quality standards for the protection of those beneficial uses. The proposed water quality standard rule amendments incorporate advances in data collection and scientific analysis. The

¹⁴ Hearing Exhibit HE-3.

¹⁵ Hearing Exhibits HE-12 and HE-13.

¹⁶ Hearing Exhibits HE-8-17 (1/28/2014 MPCA Staff Post-Hearing Response to Public Comments), HE-8-19 (2/4/2014 MPCA Staff Post-Hearing Rebuttal Response to Public Comments) and HE-8-23 (2/20/2014 MPCA Staff Rebuttal Response to MESERB and MSGA Public Comments).

¹⁷ Hearing Exhibits HE-8-3, HE-8-11 and HE-8-22.

¹⁸ Hearing Exhibit HE-8-27.

¹⁹ *Mammenga v. State Dept. of Human Services*, 442 N.W. 2d at 789-90 (Minn. 1989)

proposed change from a narrative standard to a numeric TSS is clearly tied to better data and analysis. The river eutrophication standards are needed to protect and restore Minnesota's aquatic life use goals from the impacts of eutrophication in streams. The standards are rationally related to goals of the Clean Water Act and Minnesota Statutes and are not arbitrary.

JANUARY 8, 2014
RULE HEARING
EXHIBITS INDEX
OAH Docket 60-2200-30791

The following documents were placed into the hearing record for the MPCA's proposed amendments to the rules governing Water Quality Standards; Minnesota Rules Chapters 7050 and 7053; Total Suspended Solids and River and Stream Eutrophication (Revisor's # 4104) (OAH Docket 60-2200-30791):

Hearing Exhibits can be viewed at: <http://www.pca.state.mn.us/6paqdkc>
(<http://www.pca.state.mn.us/index.php/water/water-permits-and-rules/water-rulemaking/new-water-quality-standards-for-river-eutrophication-and-total-suspended-solids.html>) in Rulemaking Documents tab as:

1. TSS-Eutroph Exhibits Bookmarked Compilation of Hearing Exhibits (wq-rule4-06p)
2. Comments from Reopened Administrative Record (wq-rule4-04z)

(MPCA internal location: X:\Agency_Files\Outcomes\WQ Standards 2011 Triennial\rule process documents\TSS-Eutroph documents\TSS-Eutrophication SONAR, rules and exhibits\Hearing Exhibit)

HE-1a - Request for Comments published in the July 28, 2008, State Register.

HE-1b - Request for comments published in the March 2, 2009, State Register.

HE-1c - Request for comments published in the June 11, 2012, State Register.

HE-2 - Proposed rules, including the Revisor's approval.

HE-3 - Statement of Need and Reasonableness ("SONAR") signed and dated July 23, 2013.

HE-4 - Certificate of Mailing the SONAR to the Legislative Reference Library and copy of the transmittal letter.

HE-5a - Notice of Hearing as mailed, Govdelivery message and Govdelivery summary of recipients.

HE-5b - Notice of Hearing as published in the State Register.

HE-6a - Certificate of Mailing Notice.

HE-6b - Certificate of Accuracy of the mailing list.

HE-7a - Certificate of Additional Notice.

HE-7 -OAH approval of Additional Notice Plan

HE-8 -Comments Received (Each comment received is numbered consecutively as HE-8-1, HE-8-2, etc.). List of comments provided below.

HE-9a - Notice to Legislators.

HE-9b - Management and Budget approval of the proposed rules.

HE-9c - Notice sent to municipalities in accordance with Minn. Stat. § 115.44, subd. 7.

HE-10 - List of Errata to SONAR, rule language and Exhibits.

HE-11 – Summary presentation slides.

HE-12 - Ecoregions of the Conterminous United States, James M. Omernik, published in the Annals of the Association of American Geographers, 77(1), 1987, pp. 118-125. USEPA document number EPA/600/3-88/037.

HE-13 – Descriptive Characteristics of the Seven Ecoregions in Minnesota, Fandrei et al, published by the Minnesota Pollution Control Agency, March 1988.

HE-14 OAH Order on the Minnesota Environmental and Economic Review Board and the Minnesota Soybean Growers Association's Comments (extended comment period- dated 2/11/14)

HE-15 OAH Order Reopening the Administrative Record (dated 3/25/14)

HE-16 Affidavit of Carol Nankivel (dated 3/28/14)

HE-17 Affidavit of Jean Coleman (dated 3/28/14)

HE-18 Copy of MPCA Govdelivery message (dated 6/7/13)

HE-19 Copy of OAH Decision 1999 WL 194069

HE-20 MPCA informational memo re: reopened administrative record

HE-8-xx Comments

Comments located on MPCA Website at <http://www.pca.state.mn.us/6paqdkc> (<http://www.pca.state.mn.us/index.php/water/water-permits-and-rules/water-rulemaking/new-water-quality-standards-for-river-eutrophication-and-total-suspended-solids.html>) in Rulemaking Documents tab as:

1. TSS-Eutroph Comments (wq-rule4-06c)
2. MPCA Staff Preliminary Response to Comments (wq-rule4-06j)
3. MPCA Final Response to Comments (wq-rule4-06s)

(MPCA internal location: X:\Agency_Files\Outcomes\WQ Standards 2011 Triennial\rule process documents\TSS-Eutroph documents\final rulemaking documents\Hearing Exhibits\Comments Received)

HE-8-1 Brian Thompson, EPA Region V

HE-8-2 Timothy Sundby, Carver Co.

HE-8-3 Linda Holst, EPA Region V

HE-8-4 Paul Nelson, Scott Co

HE-8-5 Curtis Sparks, Poplar River Management Board

HE-8-6	Steven Nyhus, Mn. Environmental Science and Economic Review Board, Flaherty and Hood
HE-8-7	Jill Thomas/Fred Corrigan, Mn Asphalt Pavers/Aggregate and Ready Mix Association
HE-8-8	Kris Sigford, Mn Center for Environmental Advocacy (Attachments HE-8-8A to 8-8E)
HE-8-9	Leslie Everett, University of Mn. Water Resources Center
HE-8-10	Alan Oberloh, City of Worthington
HE-8-11	Linda Holst, EPA Region V
HE-8-12	Paul Nelson, Scott Co.
HE-8-13	Curtis Sparks, Poplar River Management Board (Attachments HE-8-13A to 8-13E)
HE-8-14	Jim Hafner/Randy Neprash, Mn. Cities Stormwater Coalition
HE-8-15	Lynn Clarkowski, Mn. Department of Transportation (Attachments 8-15A to 8-15J)
HE-8-16	Leisa Thompson, Metropolitan Council Environmental Services
HE-8-17	Shannon Lotthammer, MPCA Preliminary Response to Comments (Attachments 8-17A to 8-17 D)
HE-8-18	Leslie Everett, University of Minnesota Water Resources Center
HE-8-19	Shannon Lotthammer, MPCA Final Response to Comments (Attachments 8-19A to 8-19D)
HE-8-20	David Lane, Mn. Environmental Science and Economic Review Board (Attachments 8-20A to 8-20B)
HE-8-21	George Goblish, Mn. Soybean Growers Association
HE-8-22	Dana Thomas, EPA Headquarters
HE-8-23	Shannon Lotthammer, MPCA Response for Extended Comment Period (Attachments 8-23A to 8-23B)
HE-8-24	David Lane, Mn. Environmental Science and Economic Review Board (rebuttal)
HE-8-25	Matthew Wohlman, Mn. Department of Agriculture
HE-8-26	Paul Nelson, Scott Co.
HE-8-27	Walter Popp/Rob Burdis, Mn. Department of Natural Resources
HE-8-28	David Lane, Mn. Environmental Science and Economic Review Board (Attachment 8-28A to 8-28B)

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Administrative Record

March 28, 2014

MPCA Information for Reopened Administrative Record.

As stated in the Order reopening the administrative record, Minnesota Law requires an agency engaged in rulemaking to submit an additional notice plan to the Office of Administrative Hearings (OAH) for approval. Minnesota law also requires agencies to provide a copy of the proposed rule to the commissioner of agriculture in accordance with the conditions in Minn. Stat. § 14.111 if the proposed rule will affect farming operations.

14.111 FARMING OPERATIONS.

Before an agency adopts or repeals rules that affect farming operations, the agency must provide a copy of the proposed rule change to the commissioner of agriculture, no later than 30 days prior to publication of the proposed rule in the State Register.

A rule may not be invalidated for failure to comply with this section if an agency has made a good faith effort to comply.

This memorandum provides information on the Minnesota Pollution Control Agency's (MPCA) notice to the Commissioner of Agriculture during the rulemaking process for proposed amendments to Minn. Rules chs. 7050 and 7053. As detailed in this memorandum, the MPCA provided actual notice to the Commissioner of Agriculture at least 30 days in advance of publishing the proposed rules in the *State Register*.¹ In addition, the Commissioner of Agriculture reviewed the proposed rules and decided not to comment on the proposed rules.² This memorandum also provides information on MPCA's compliance with the additional notice plan submitted to the OAH.

¹ Hearing Exhibit HE-5b: Notice of Hearing published in *Minnesota State Register*, Monday, November 18, 2013.

² Hearing Exhibit HE-8-25: March 27, 2014, letter to Honorable James E. LaFave from Matthew Wohlman, Assistant Commissioner, Minnesota Department of Agriculture (referred to herein as "March 27, 2014, MDA letter").

A. The MPCA Provided Actual Notice of the Proposed Rulemaking to the Commissioner of Agriculture More Than 30 Days Prior to Public Notice of the Rule.

The MPCA provided actual notice of the proposed rule to the Commissioner of Agriculture more than 30 days prior to the publication on November 18, 2013, of the proposed rule in the *State Register* and the Commissioner of Agriculture acted on the actual notice received.

- The Commissioner of Agriculture has staff assigned to monitor proposed MPCA water quality rules.³ These staff are delegated responsibility for tracking and participating in rule development stakeholder meetings on the proposed amendments to Minn. Rules ch. 7050 and 7053. In this case, Mr. Robert Sip, State Policy Analyst for the Minnesota Department of Agriculture (MDA) in the Pesticide and Fertilizer Management Division was the Commissioner's delegate for the proposed rulemaking.
- As part of his duties, Mr. Sip received notices on the proposed rule amendments through the GovDelivery message service from at least December 27, 2011, including a message on June 7, 2013, which provided an electronic link to a draft of the proposed rule amendments.⁴ A copy of the June 7, 2013, GovDelivery message is included as proposed Hearing Exhibit HE-18.
- Mr. Sip met regularly with MDA senior management, including representatives from the MDA commissioner's office, to discuss pending rulemaking activities. The proposed amendments to Minn. Rules ch. 7050 and 7053 were discussed at these meetings and the MDA decided not to comment on the proposed amendments.⁵
- In addition to Mr. Sip, MPCA sent rule notices to at least 8 other MDA staff through the GovDelivery message service.⁶

The intent of Minn. Stat. § 14.111 is to provide notice to the Commissioner of Agriculture with sufficient time and specificity to provide an opportunity for review and comment on proposed rule changes that may affect farming operations. MPCA provided actual notice to the Commissioner of Agriculture that met the spirit and intent of the notice requirement in Minn. Stat. § 14.111.

³ March 27, 2014, MDA letter. See also, Proposed Exhibit HE-17: Affidavit of Jean Coleman.

⁴ Id. See also, Proposed Hearing Exhibit HE-16: Affidavit of Carol Nankivel. MPCA sent the following notices to Mr. Sip through GovDelivery message service:

- Notice of Request for Comments (3rd) 6/11/12 (Hearing Exhibit HE-1c)
- Notice of Water Quality Standards Activities 8/20/12
- Notice of Availability of pre-proposal draft rule language 6/7/13
- Notice of Hearing 11/18/13 (Hearing Exhibit HE-5a)
- Notice of Extended Rebuttal Period 2/13/14
- Notice of Re-opened Comment period 3/26/14

⁵ March 27, 2014, MDA letter. See also, Proposed Exhibit HE-17: Affidavit of Jean Coleman.

⁶ See Proposed Hearing Exhibit HE-16: Affidavit of Carol Nankivel.

B. The MPCA Complied With Its Approved Additional Notice Plan

Notwithstanding the fact that the MPCA provided the Commissioner of Agriculture with multiple notices concerning the proposed rulemaking and with a draft of the rule more than 30 days prior to public notice, MPCA also complied with its approved Additional Notice Plan (Plan). The MPCA submitted its Plan to the Office of Administrative Hearings (OAH) on July 5, 2013. The Plan did not state that the MPCA would provide a copy of the rule to the Commissioner of Agriculture pursuant to Minn. Stat. § 14.111. Attachment 2 to the Plan included an excerpt from the Statement of Need and Reasonableness (SONAR)⁷ addressing MPCA's proposed public notice activities. MPCA stated on page 5 of Attachment 2 to the Plan that it would provide notice to the Department of Agriculture at the time the proposed rules were published. Notice at the time proposed rules are published is not Minn. Stat. § 14.111 notice. The MPCA believes that its proposed Plan did not intend or provide for Minn. Stat. § 14.111.

The MPCA does not believe that the proposed rules affect farming operations and attempted to explain why in its SONAR and Attachment 2 to the Plan. The MPCA's SONAR, page 20, and Attachment 2, states:

Minn. Stat. § 14.111 requires an agency to provide a copy of the proposed rule changes to the Commissioner of Agriculture no later than 30 days prior to publication of the proposed rule in the State Register if the proposed rules will affect farming operations. The amendments relating to eutrophication and total suspended solids may have a limited effect on agricultural practices, through programs that identify voluntary measures to implement Best Management Practices to reduce erosion and runoff. However, adoption of these standards does not create new regulatory authority affecting agricultural discharges. The MPCA will provide notice to the Department of Agriculture when the proposed rules are published.

The MPCA intended to convey that the adoption of new or modified water quality standards does not result in an effect on farming operations because water quality standards, in and of themselves, do not require any party to act. In addition, any effect on farming operations would be entirely voluntary. Through various MDA programs,⁸ farming operations could voluntarily agree to implement Best Management Practices that, among other benefits, improve water quality. These programs, however, are not linked to water quality standards promulgated by MPCA. Voluntary practices undertaken by farming operations to improve water quality are not required to meet water quality standards. The MPCA concluded that because any potential effects of the proposed rule on farming operations were limited to voluntary, indirect effects it would not provide notice to the Commissioner of Agriculture pursuant to Minn. Stat. 14.111. The phrase "may have a limited effect on farming operations" could be

⁷ Hearing Exhibit HE-3.

⁸ See MDA water protection programs at <http://www.mda.state.mn.us/protecting/waterprotection.aspx>, and MDA Pesticide and Fertilizer Management Division programs summarized at <http://www.mda.state.mn.us/about/divisions/pfmd.aspx>.

read to mean that the proposed rule would have a mandatory, direct effect on farming operations, however limited, but MPCA did not intend to convey that meaning.

C. Any Error Concerning Notice to the Commissioner of Agriculture is Harmless Error.

Minn. Stat. § 14.15 gives the administrative law judge the discretion to disregard any error or defect in a rule proceeding upon a finding that a procedural requirement imposed by law “(1) did not deprive any person or entity of an opportunity to participate meaningfully in the rulemaking process; or (2) that the agency has taken corrective action to cure the error or defect so that the failure did not deprive any person or entity of an opportunity to participate meaningfully in the rulemaking process.” MPCA’s actions did not deprive the commissioner of agriculture of an opportunity to participate meaningfully in the rulemaking process.

In 1999, the OAH considered the question of harmless error in a rule hearing where the Environmental Quality Board (EQB) failed to provide Minn. Stat. § 14.111 separate notice to the Commissioner of Agriculture prior to publication of the proposed rule in the *State Register*. The Administrative Law Judge decided that because the Commissioner of Agriculture sat on the EQB and staff from the Department of Agriculture were involved in drafting the rule, the Board’s failure to formally notify the Department of Agriculture of the proposed rule prior to publication was a harmless error.⁹ Although the Commissioner of Agriculture and MDA staff were not involved in the same manner in this rulemaking, their involvement was similar enough to support a finding of harmless error. MPCA’s proposed Hearing Exhibit 16 demonstrates that the MPCA notified MDA staff delegated by the Commissioner of Agriculture to participate in MPCA rulemaking throughout the rule development process. The March 27, 2014, MDA letter shows that the Commissioner of Agriculture knew of the rule, had the necessary information to make a decision on whether to comment on the proposed rule and decided not to comment. As a result the error, if any, is harmless.

If the MPCA’s conclusion that the proposed rules do not affect farming operations because any potential effects are indirect and voluntary is error, the error is harmless.

CONCLUSION

The MPCA provided actual notice to the Commissioner of Agriculture more than 30 days prior to publication of the rule, although it was not Minn. Stat. § 14.111. The MPCA did not provide notice under Minn. Stat. § 14.111 because it reasonably concluded that the statute did not apply to this rule which has at most, only voluntary, indirect impacts on farming operations. As provided for in Minn. Stat. § 14.15, the proposed rule amendments should not be invalidated based on MPCA’s failure to provide the specific Minn. Stat. § 14.111 notice which resulted in harmless error.

⁹ Hearing Exhibit HE-19: Office of Administrative Hearings, IN THE MATTER OF THE PROPOSED AMENDMENTS TO RULES GOVERNING THE ENVIRONMENTAL REVIEW PROGRAM RELATING TO THE APPLICATION OF PROVISIONS ON CONNECTED ACTIONS TO ANIMAL FEEDLOTS, MINN. RULES, CHAPTER 4410, 1999 WL 194069 (Minn.Off.Admin.Hrgs.)